

FAR 1952

CLASSIFICATION CONFIDENTIAL
 SECURITY INFORMATION
 CENTRAL INTELLIGENCE AGENCY
 INFORMATION FROM
 FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT

CD NO.

50X1-HUM

COUNTRY Poland
 SUBJECT Economic - Chemicals industry, pharmaceuticals
 liquid fuel
 HOW Scientific - Biographic
 PUBLISHED Daily, weekly newspapers; monthly periodicals
 WHERE
 PUBLISHED Warsaw; Krakow
 DATE
 PUBLISHED Jul - 19 Oct 1952
 LANGUAGE Polish

DATE OF
INFORMATION 1952

DATE DIST. 24 Feb 1953

NO. OF PAGES 4

SUPPLEMENT TO
REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE
 OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793
 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVEL-
 ATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS
 PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers and periodicals as indicated.

AWARDS, DEVELOPMENTS IN THE POLISH CHEMICAL INDUSTRY

1952 STATE AWARDS DISTRIBUTED -- Warsaw, Glos Pracy, 30 Sep 52

Among the recipients of 1952 State Prize, Class II, awarded by Vice-Premier
 Jedrychowski at the Second Congress of Engineers and Technicians were:

Dr-Engr Witold Mazgaj, for introducing a method of producing "precypitat"
 without the use of sulfuric acid.

Magister-Engr Aleksander Pilc, for pioneering in the sphere of working out
 new production methods and transferring them from a chemical institute to
 factories.

POLAND PRODUCING NEW FERTILIZER -- Warsaw, Glos Pracy, 30 Sep 52

When Dr-Engr Witold Mazgaj, manager of the Instytut Syntezy Chemicznej
 (Institute of Chemical Synthesis) of the Zaklady Azotowe imienia Dzierzynskiego
 (Dzierzynski Nitrogen Plants) in Tarnow returned from Warsaw in mid-October 1950,
 he brought with him the Soviet technical documentation for the production of
 "precypitat" and a recommendation from the Ministry of the Chemical Industry that
 production of the new fertilizer be begun at once.

In the first half of 1951, the equipment in the pilot plant was installed.
 Meanwhile, large installations were assembled for work on a semi-industrial
 scale. In March 1952, the first tons of precypitat were produced. Mazgaj was
 in charge of the operation, assisted by Magister Kwiecien, and Engineers Turlej,
 Baran, and Bielecki.

According to Mazgaj, precypitat has been studied now for about 30 years.
 At present, the production of precypitat has been developed on a large scale only
 in the USSR. This new fertilizer has many economic advantages: it is insoluble
 in water, easy to store, and inexpensive to produce.

Up to now, farmers have used only superphosphate, which when spread over
 the field was either washed away by rain or dissolved and seeped into the earth.
 Precypitat can be used equally well on acid or sandy soils, and it will have a

- 1 -

CLASSIFICATION		<u>CONFIDENTIAL</u>	
STATE	<input checked="" type="checkbox"/> NAVY	<input checked="" type="checkbox"/> NSRB	DISTRIBUTION
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/> FBI	

CONFIDENTIAL

50X1-HUM

special application in the subcarpathian area of Poland. It is expected that even the poorest soils will be improved with this new fertilizer, increasing the yield from 6 to 9 percent. Even though the process of producing precipitat is very complicated, the cost of production is cheaper than for superphosphate. Nitric acid is used in the production of precipitat. By-products such as calcium nitrate and fluorosilicate are obtained in its production.

At first, 7 tons of precipitat were produced per day. Now, 15 tons a day are sent to the PGR (Panstwowe Gospodarstwa Rolne, State Farms), and, in the near future, nearly 200 tons will be produced daily.

Mazgaj intends to study the possibility of separating the fluorine from the phosphorus in the precipitat, thereby making this product suitable for animal feed [sic]. Precipitat is a white powder containing 40 percent phosphorus and 40 percent calcium. The fluorosilicates in precipitat are harmful to animals.

The apatite for the production of precipitat is imported from the Kola Peninsula of the USSR. The apatite is ground in huge mills.

New transport equipment has recently been built to convey limestone. Gas-kets have been improved for the rotary filters, and a new method of constructing reactors has reduced consumption of high-quality steel by 50 percent. Mroz, secretary of the party organization, submitted a suggestion which resulted in reducing the time required for the precipitation from 8 hours to 6 hours.

Mazgaj and Kwiecien have been jointly awarded the State Prize, Class II.

POLAND TO PRODUCE IODINE FROM OIL WELL BRINE --Krakow, Nafta, Vol VIII, No 7, Jul 52.

In 1951, Wladyslaw Chajec, manager of the Brine Division of the Instytut Naftowy (Petroleum Institute), together with his co-workers Mieczyslaw Solecki and Zofia Barud, received the State Group Award for discovering a new method of producing iodine from oil well brine.

Chajec, Solecki, and Barud worked out a simple, cheap, and efficient method of obtaining iodine from the brine which accompanies crude petroleum. Brine always has been a source of annoyance to both the driller and oil well operator. Up to now, it was drained off after it had been separated from petroleum.

Chajec discovered that the brine contained large amounts of iodine and bromine. After determining that some brine contained up to 144 milligrams of pure iodine per liter, Chajec studied the problem of recovering the iodine. (Not many waters in the world contain more than 20 milligrams of iodine per liter.)

The first results of the tests were worked out in 1949 in the laboratory of the Instytut Naftowy, despite shortages of laboratory equipment. To separate iodine from the brine, the adsorption method was selected as the most dependable. A substance was found which was a perfect adsorbent capable of concentrating on its surface 90 percent of the iodine which was previously liberated from brine with chlorine or nitrite of iodine [sic]; probably should be sodium nitrite.

In 1950, the Instytut Naftowy conducted a study on a semi-industrial scale in an old forge near the bore hole area where high-iodine-content brine had been found during prospecting for petroleum.

- 2 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

SYNTHETIC LIQUID FUEL PRODUCTION INCREASES -- Warsaw, Trybuna Ludu, 10 Sep 52

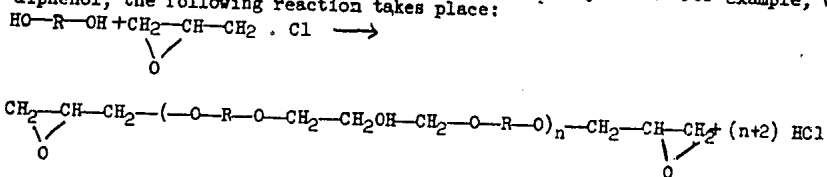
Włodzimierz Kaczorowski and Adam Bazan, engineers in one of the plants of the Państwowe Zakłady Syntetyczne "Dwory" (Dwory State Synthetic Chemical Products Plants) near Oswiecim have, through the use of a residual gas considered up to now a useless product, increased the production of "syntina," a synthetic fuel intermediate, by 10 percent.

One of the bottlenecks in production was the generator division. However, the shortage of blowers of required efficiency was eliminated by the repair and conversion of scrapped equipment. Generator efficiency was increased thus by 40 percent. Stanisław Krogulski, manager of the generator division, initiated this improvement.

By the end of August 1952, the year plan for production of "syntina" was fulfilled 80 percent. In 1953, a further production increase of 20 percent is anticipated.

STUDY POSSIBILITIES OF PRODUCING EPOXY-RESINS -- Warsaw, Przemysł Chemiczny, Vol (31) VIII, No 9, Sep 52

Among the synthetic resins that have made their appearance on the market during the last 7 years, the so-called epoxy-resins occupy a special place because of their extraordinary properties and various uses. From the chemical viewpoint, epoxy-resins are built up from chains with "epi-oxo" groups at the ends. The "epi-oxo" compounds are formed through the action of hydroxyl groups of polyphenols or polyalcohols on the epichlorohydrins, or dichlorohydrins. For example, with a diphenol, the following reaction takes place:



No difficulties will be encountered in obtaining the raw material resources for the production of these resins in Poland. The supply of phenol and acetone for the production of "dian" (4,4 -- dihydroxydiphenyldimethylmethane) at Pustków is adequate. The situation in regard to glycerin, indispensable for the synthesis of dichlorohydrin or epichlorohydrin, is worse. Nevertheless, if the extraordinary properties of these new resins are taken into consideration, the temporary shortage of glycerin should not be a source of discouragement to Poland. At present, catalysts such as oxalic acid, phthalic anhydride, piperidine, and other amines are available. Others such as dicyanodiamide, diethylamine, and dibutylamine will be available before the end of the Six-Year Plan.

DISCOVER NEW METHOD OF PRODUCING LANOLIN -- Warsaw, Służba Zdrowia, No 41 (165), 12 Oct 52

One of the many attainments of the Polish pharmaceutical industry is the development of a method of producing lanolin from by-products of wool scouring.

The new method of producing lanolin, more economical and less complicated than methods used up to now, eliminates inflammable organic solvents, lowers labor costs, increases productivity, improves the quality of lanolin, and greatly shortens the production cycle.

- 3 -

CONFIDENTIAL

CONFIDENTIAL

50X1-HUM

The development of the Polish method of producing lanolin met with numerous difficulties, but they were overcome through the efforts of the workers of Pomorska Spoldzielnia Chemiczna (Pomorze Chemical Cooperative) in Bydgoszcz. Workers who distinguished themselves in this work were Engineer Manczak, Engineer Wolnicki, foreman Straus, Przybylowski, Gaca, and Gorackowski.

Polish production covers domestic requirements, and in the near future lanolin will be exported.

COMPLAINTS ABOUT PHARMACEUTICALS -- Warsaw, Sluzba Zdrowia, No 42 (166), 19 Oct 52

[The following items are extracts from two letters to the editor.]

The Apteka Spoleczna nr 32 (Socialized Pharmacy No 32) in Jaworze received 2-percent Polokain with adrenalin, serial No 3152, for injections. The preparation, manufactured by the Warszawskie Zaklady Farmaceutyczne (Warsaw Pharmaceutical Research Laboratories), was the color of tea. Since Polokain is normally white, this color would indicate that the solution was spoiled. Doctors and dentists considered this solution harmful and did not want to use it on patients. The problem could be avoided if Centrofarm would enclose instructions with its products. The wojewodstwo division of CAS [Centrala Aptek Spolecznych, Central Office of Socialized Pharmacies?] has failed to clarify the matter or to withdraw the solution from use.

* * *

Glycerophosphate produced by the Wytownia Farmaceutyczna Spoldzielni Pracy "Galena" (Pharmaceutical Plant of the Galeja Workers' Cooperative), Ulica Krucza 62, Wroclaw, on 8 April 1952, had defective caps on the 80-gram bottles, and consequently the contents were not protected from dust and air. In addition, the bottles were not sealed properly to prevent the contents from spilling.

Not only the wojewodstwo division of the CAS in Wroclaw, but also the health division of the WRN (Wojewodzka Rada Narodowa, Wojewodstwo People's Council) and Centrofarm in Warsaw should attend to these matters.

- E N D -

- 4 -

CONFIDENTIAL